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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,060	05/13/2005	Rafael Meeusen	BE 020036	9418
65913	7590	12/14/2007	EXAMINER	
NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			LEE, PING	
			ART UNIT	PAPER NUMBER
			2615	
			NOTIFICATION DATE	DELIVERY MODE
			12/14/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

<b>Office Action Summary</b>	Application No. 10/535,060	Applicant(s) MEEUSEN, RAFAEL	
	Examiner Ping Lee	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Therssen et al (hereafter Therssen) (EP000512606B1).

Regarding claim 1, Therssen discloses a method for a receiver (Fig. 1) having a signal path incorporating a tuner (T), a frequency demodulator circuit (FD) for supplying an analog stereo multiplex signal comprising a baseband stereo sum signal, a 19 kHz stereo pilot and a stereo difference signal, which is double sideband amplitude-modulated on a suppressed 38 kHz subcarrier, a sampler (A/D) for converting the analog stereo multiplex signal into a time discrete digital stereo multiplex signal and a stereo decoder (SD) for decoding the time discrete digital stereo multiplex signal into a time-discrete digital stereo sum and a time discrete digital stereo difference signal, wherein the analog stereo multiplex signal is converted into a time discrete digital stereo multiplex signal and then the time discrete digital stereo multiplex signal is shifted over a frequency of 19 kHz (by M2) to extract at least one of the time-discrete digital stereo sum and the time discrete digital stereo difference signal (see Fig. 2 for extracting the difference signal and the sum signal using SMO, and decode L+R and L-R to obtain L and R).

Regarding claim 4, as shown in Figs. 1 and 2, Therssen shows the stereo sum signal is extracted in a parallel branch (SD and M2 are in parallel) by a second low pass filter (within SD).

3. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Wildhagen (US007149312B1).

Regarding claims 1 and 2, Wildhagen discloses a method for a receiver having a signal path incorporating a tuner, a frequency demodulator circuit (although the tuner and frequency demodulator circuit are not explicitly shown, they are inherently included) for supplying an analog stereo multiplex signal comprising a baseband stereo sum signal, a 19 kHz stereo pilot and a stereo difference signal, which is double sideband amplitude-modulated on a suppressed 38 kHz subcarrier, a sampler (14) for converting the analog stereo multiplex signal into a time discrete digital stereo multiplex signal and a stereo decoder (Fig. 5) for decoding the time discrete digital stereo multiplex signal into a time-discrete digital stereo sum and a time discrete digital stereo difference signal, wherein the analog stereo multiplex signal is converted into a time discrete digital stereo multiplex signal and then the time discrete digital stereo multiplex signal is shifted over a frequency of 19 kHz (37) to extract at least one of the time-discrete digital sum and the time discrete digital stereo difference signal (through 20, 21, 24), and further shifted (by 18) and having a lowpass filter (21 or 24).

Regarding claim 3, the claimed complex filter reads on element 21.

Regarding claim 4, Wildhagen shows the second low pass filter (15) and the path from 15 to 16 is parallel to the path from 20, 21 and 24.

Regarding claims 5, 9 and 10, Wildhagen show two serial frequency shifting circuits (e.g. in Fig. 5, elements 37 and 20 are connected in series or 37 and 20). By definition, shifting means varying.

Regarding claim 6, Wildhagen shows the low pass filter (21 or 24 in Fig. 5).

Regarding claim 7, Wildhagen shows the complex filter (21 or 24 in Fig. 5).

Regarding claim 8, Wildhagen shows the second low pass filter (15).

### ***Response to Arguments***

4. Applicant's arguments filed 9/19/07 have been fully considered but they are not persuasive.

In response to applicant's argument that Wildhagen fails to show that the time discrete digital stereo multiplex signal is shifted over a frequency of 19 kHz to extract at least one of the time-discrete digital stereo sum and the time discrete digital stereo difference signal because Wildhagen teaches how to extract pilot signal only, this is not persuasive. As shown in Fig. 5, the pilot signal,  $\omega_{pilot}$ , is used to extract the difference signal through 20, 21 and 24.

In response to applicant's argument regarding the frequency shifting circuits, elements 31 and 20 were not the frequency shifting circuits. The claim is very broad, so element 37 and 20 or 37 and 20 could read on the limitation.

In response to applicant's argument that that Therseen fails to show that the time discrete digital stereo multiplex signal is shifted over a frequency of 19 kHz to extract at least one of the time-discrete digital stereo sum and the time discrete digital stereo

difference signal, this is not persuasive. As shown in Fig. 3, the pilot signal,  $f_p$  is located between the L+R and L-R. L+R is located in audible frequency band, but L-R of the multiplexed signal is not. Without shifting the L-R over a frequency of 19 kHz, L-R will not be at audible frequency, and consequently L and R could not be decoded properly to be applied to speakers.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

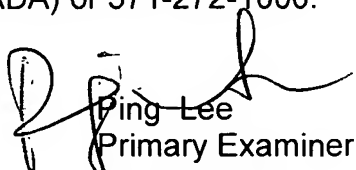
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ping Lee whose telephone number is 571-272-7522. The examiner can normally be reached on Monday, Wednesday and Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Ping Lee  
Primary Examiner  
Art Unit 2615

pwl